**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (previously presented): A data acquisition apparatus for scanning a surface to record digital images thereof and to record data for determining three-dimensional coordinates thereof, said apparatus comprising:

at least one camera for recording said digital images of said surface, said camera having an optical axis;

at least two lasers for marking points in said digital images for determining said three dimensional coordinates of said surface, said lasers having optical axes, said optical axes of said camera and said lasers being essentially parallel;

an essentially horizontal rail for mounting said camera and said lasers, said camera being mounted between said lasers, and said rail having means for horizontally shifting said camera and said lasers along said rail, the positions of said lasers being adjustable relative to the camera, via said means for horizontally shifting said camera and said lasers, depending on the scale of the surface to be recorded;

at least one essentially vertical post attached to said rail by means for rotating and horizontally shifting said rail, said post having means for vertically shifting said rail;

at least one movable platform for mounting said posts and for positioning said camera and said lasers proximate to said surface; and,

data acquisition equipment for adjusting said platforms, said posts, said rail, said camera, and said lasers; for recording position data for said platforms, said posts, said rail, said camera, and said lasers; and, for recording said digital images.

Claim 2 (original): The apparatus of claim 1 wherein said surface is selected from the group comprising an object, an area, a room, a building, an indoor area, and an outdoor area.

Claim 3 (original): The apparatus of claim 1 wherein said surface is variable in size.

Claim 4 (currently amended): A data acquisition system for generating a three-dimensional data model of a surface, said system comprising:

a data acquisition apparatus for scanning said surface to record digital images thereof and to record data for determining three-dimensional coordinates thereof, said data acquisition apparatus comprising:

at least one camera for recording said digital images of said surface, said camera having an optical axis; at least two lasers for marking points in

said digital images for determining said three-dimensional coordinates of said surface, said lasers having optical axes, said optical axes of said camera and said lasers being essentially parallel;

an essentially horizontal rail for mounting said camera and said lasers, said camera being mounted between said lasers, and said rail having means for horizontally shifting said camera and said lasers along said rail, the positions of said lasers being adjustable relative to the camera, via said means for horizontally shifting said camera and said lasers, depending on the scale of the surface to be recorded;

at least one essentially vertical post attached to said rail by means for rotating and horizontally shifting said rail, said post having means for vertically shifting said rail;

at least one moveable platform for mounting said posts and for positioning said camera and said lasers proximate to said surface; and,

data acquisition equipment for adjusting said platforms, said posts, said rail, said camera, and said lasers; for recording position data for said platforms, said posts, said rail, said camera, and said lasers; and, for recording said digital images; and,

a data acquisition computer system in communication with said data acquisition apparatus, said data acquisition computer system comprising:

means for adjusting said data acquisition apparatus in accordance with user instructions;

means for receiving said position data and said digital images from said data acquisition apparatus;

means for determining three-dimensional coordinates of said surface from said position data and said digital images;

means for associating said digital images with said three-dimensional coordinates to produce said three-dimensional data model;

memory for storing said position data, said digital images, said three-dimensional coordinates, and said three-dimensional data model;

a display for presenting said three-dimensional data model to said user; and,

an input device for accepting user instructions from said user for adjusting said data acquisition apparatus.

Claim 5 (original): The data acquisition system of claim 4 and further comprising a post-processing computer system for formatting said three-dimensional data model for export to an external application.

Claim 6 (original): The data acquisition system of claim 4 wherein said data acquisition computer system includes a master node controlling a network of parallel computer slave nodes.

Claim 7 (original): The data acquisition system of claim 6 wherein said network of parallel computer slave nodes has a configuration selected from the group comprising a cube, a hyper-cube, a mesh, and a layered web.

Claim 8 (original): The data acquisition system of claim 4 wherein said user instructions include predetermined data parameters for said three-dimensional data model.

Claim 9 (original): The data acquisition system of claim 8 wherein said predetermined data parameters are selected from the group comprising area mode, object mode, size of area, size of object, resolution, accuracy, and detail.

Claim 10 (cancelled): A method of generating a three-dimensional data model of a surface, said method comprising the steps of:

     a)      selecting data parameters for said three-dimensional data model;

b)      configuring a data acquisition system corresponding to said data parameters, wherein said data acquisition system comprises a data acquisition apparatus and a data acquisition computer system;

c)      scanning said surface with said data acquisition system to obtain digital images of said surface and position data for determining three-dimensional coordinates of said surface;

d)      determining said three-dimensional coordinates of said surface from said position data and said digital images;

e)      associating said digital images with said three-dimensional coordinates to produce said three-dimensional data model; and,

f)      storing said three-dimensional data model in said data acquisition system.

Claim 11 (cancelled): The method of claim 10 and further comprising the steps of:

a)      transferring said three-dimensional data model to a post-processing computer system;

b)      providing said post-processing computer system with formatting parameters of an external application for said three-dimensional data model;

    c)     formatting said three-dimensional data model in accordance with said formatting parameters to produce a formatted three-dimensional data model;

    d)     storing said formatted three-dimensional data model in said post-processing computer system; and,

    e)     exporting said formatted three-dimensional data model from said post-processing computer system to said external application.

Claim 12 (cancelled): The method of claim 10 wherein said step of configuring said data acquisition system further comprising the steps of:

    a)     calibrating said data acquisition apparatus.

Claim 13 (cancelled): The method of claim 10 wherein said step of scanning said surface further comprising the steps of:

    a)     establishing a survey grid proximate to said surface in accordance with said data parameters, wherein said survey grid includes a plurality of survey grid cells;

    b)     locating said data acquisition apparatus on a first survey grid cell within said survey grid;

    c)     recording said position data and said digital images for a plurality of adjustments of said data acquisition apparatus, wherein said adjustments are in accordance with said data parameters; and,

    d)     repeating said steps of locating said data acquisition apparatus and recording said position data and said digital images for a second and remaining survey grid cells within said survey grid.

Claim 14 (previously presented): The apparatus of claim 1 wherein said data acquisition equipment includes a data acquisition computer system in communication with said data acquisition apparatus, said data acquisition computer system comprising:

    means for adjusting said data acquisition apparatus in accordance with user instructions;

    means for receiving said position data and said digital images from said data acquisition apparatus;

    means for determining three-dimensional coordinates of said surface from said position data and said digital images;

    means for associating said digital images with said three-dimensional coordinates to produce said three-dimensional data model;

    memory for storing said position data, said digital images, said three-dimensional coordinates, and said three-dimensional data model;

    a display for presenting said three-dimensional data model to said user; and,

an input device for accepting user instructions from said user for adjusting said
data acquisition apparatus.

Claim 15 (previously presented): The apparatus of claim 14 further comprising a post-
processing computer system for formatting said three-dimensional data model for export
to an external application.

Claim 16 (new): The apparatus of claim 14 wherein said data acquisition computer
system includes a master node controlling a network of parallel computer slave nodes.

Claim 17 (new): The apparatus of claim 16 wherein said network of parallel computer
slave nodes has a configuration selected from the group comprising a cube, a hyper cube,
a mesh, and a layered web.

Claim 18 (previously presented): The apparatus of claim 14 wherein said user
instructions include predetermined data parameters for said three-dimensional data
model.

Claim 19 (previously presented): The apparatus of claim 18 wherein said predetermined
data parameters are selected from the group comprising area mode, object mode, size of
area, size of object, resolution, accuracy, and detail.